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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,364	03/09/2004	Steven G. Keener	38190/273111	2239

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EXAMINER

SAETHER, FLEMMING

ART UNIT PAPER NUMBER

3677

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/796,364

Applicant(s)

KEENER, STEVEN G.

Examiner

Flemming Saether

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 and 38-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 38-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-25 and 41-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 11-15, are confusing to where it is unclear what applicant intends to claim.

In claim 11, line 6-8 the second head is defined as connected to the shank and having a diameter greater than the dimension of the aperture thus equating the "second head" to element 22 in the drawings then, in lines 13-14 the "second head" is required to have a "blind relative adjustment between the second head and the shank" and is not seen where the second head as defined is capable of having any "adjustment" since it remains fixed in location.

Also in claim 11 it is unclear what is intended to be "a shank" (line 3) since there is no feature disclosed which includes both a first head connected and first end (line 5) and a second head connected at a second end (line 5). Indeed if it then member labeled (32) as required to arguably have the relative adjustment then the second head cannot be considered as connected thereto.

Furthermore, again claim 11 requires the "shank" to be the member labeled 12 in the drawings since it is the only member having a head with a dimension greater than the aperture however, then in claims 15 and 16 there is required a "sleeve" having internal threads and the "shank" to have external threads which is impossible in the disclosed device given the requirement of claim 11.

Therefore, it remains simply unclear what applicant intends the various limitation of claim 11-25 to refer to since they cannot be applied to the disclosed device. It appears claims 11-25 may be drawn to an alternate embodiment. Due to the confusion and indefiniteness associated with claims 11-25, there could be no meaningful consideration of the claims in relation to the prior art.

In claim 1, it is unclear what applicant intends by "integrated" because applicant argues that it means the pieces are unitary, by arguing the integrated feature defines over Berecz, yet then in claim 38 integrated is further limited to "an integral unitary metal member" which is what applicant has already argued integrated to mean. Thus the intended limitation of both "integrated" and "an integral metal member" are unclear since applicant interprets them as having the same meaning.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3677

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-7 and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Berecz (US 4,859,128). In Berecz there is disclosed a blind composite-metal fastener comprising a metallic stem (18) defining a deformable first head (37) and a composite sleeve (14) with an enlarged second head (12) wherein the fastener is configured to be inserted through an aperture structural members (30, 32) with the first head being deformed to be larger than the aperture to fasten the members together. The sleeve along with the second head is made of a composite carbon fiber reinforced resin and the stem may be formed of titanium and includes a breakneck groove (44). In regards to claim 38 the deformable first head and shank are considered integral in the assembled state and in regards to claims 39, the configuration of the head to contact only one of the structural member is an intended use limitation of which Berecz would be capable. Although also an intended use limitation, the sleeve of Berecz is shown to extend through the apertures.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 7, 8, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (US 4,478,543) in view of Gapp (US, 4,478,543). In the embodiment of Fig. 3, Lyon discloses a blind composite-metal fastener comprising a metallic stem (58) defining a deformable first head (62) and a resin sleeve (54) with an enlarged second head (52) wherein the sleeve is configured to be inserted through an aperture structural members (not labeled) with the first head being deformed to be larger than the aperture to fasten the members together to contact only one of the members. Lyon does not disclose the sleeve to be a resin composite. Gapp teaches to form a fastener as a composite resin particularly a carbon fiber reinforced polyetheretherketone resin. At the time the invention was made, it would have been obvious of one of ordinary skill in the art to make the sleeve out of a composite resin as disclosed in Gapp in order to provide greater strength to the fastener. The greater strength would enable the fastener to sustain greater loads without failure.

Claims 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (US 4,478,543) in view of Gapp (US, 4,478,543) as applied to claim 1 above and further in view of Pratt (US 4,457,652). Modified Lyon does not disclose the stem and sleeve with a threaded connection. Pratt discloses a fastener comprising a sleeve (21) and a stem (30) wherein the sleeve and stem are threadedly coupled (at 23) such that as the stem is rotated relative to the sleeve, a head (40) is expanded (see Figs. 1-3). There is further disclosed a breakneck groove (33) as well as an optional plastic sealing insert, an annular metallic locking ring (36) and finally, it is

noted that the stem is made of titanium. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the fastener of modified Lyon with a threaded type connection as disclosed in Pratt because Pratt teaches the equivalence of threaded and non-threaded (Fig. 11).

Claim 3 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon in view of Gapp as applied to claim 1 above and further in view of Keener (US 6,499,926). Modified Lyon does not disclose a curable organic coating. Keener discloses to provide a fastener with a curable organic coating. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the fastener of modified Lyon with a curable organic coating as disclosed in Keener in order to protect the fastener as discussed in Keener.

### ***Response to Remarks***

Applicant argues that the claims are not indefinite under section 112 second paragraph by way of an explanation of how the invention operates. In response, the examiner understands the operation of the invention. However, the claims are directed to an article thus operation is not of particular interest but, instead it is the structure which must be clearly defined. Furthermore, applicant did not address the other area of indefiniteness as associated with claims 15 and 16 and yet further has introduced another area of indefiniteness by the relative adjustment. As such, the claims continue to be indefinite.

In regards to the prior art, applicant argues that the claims define over both the Berecz (US 4,859,128) reference and any combination involving Lyon (US 4,478,543) since neither reference discloses the metallic stem *integrated* with the deformable first head. In response, while the examiner understands applicant's position, the examiner disagrees the "integrated" defines over the arrangement disclosed in either Berecz or Lyon. Applicant is reminded that the claims are required to be given their broadest reasonable interpretation. With this in mind, the stem being integrated with the deformable head does not require them to be formed as a single unitary piece but is instead broad enough to read on arrangement of both Berecz and Lyon where the stem and deformable head are separate pieces "integrated" together in the assembled state. This interpretation of integrated is equally applicable to the "integral unitary metal member" required of claim 38. Furthermore, even the instant invention shown the stem and deformable head as being separate pieces by including a line dividing the deformable head from the stem.

The replacement drawing sheets have been approved.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP



§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

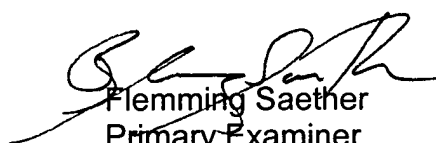
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 571-272-7071. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3677

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Flemming Saether  
Primary Examiner  
Art Unit 3677